

AUSTRALIAN COLEOPTERA. NOTES AND NEW SPECIES. VIII.

By H. J. CARTER, B.A., F.E.S.

(Eight Text-figures.)

[Read 31st May, 1933.]

Family BUPRESTIDAE.

STIGMODERA (CASTIARINA) SUBTINCTA, n. sp.

Oblong-ovate. Head, pronotum, scutellum, appendages and the greater part of underside golden green; elytra, save for the dark basal border, yellow with an orange tint—the latter especially around the apex; the apical four segments of abdomen yellow, sometimes showing faint metallic gleams.

Head deeply excavate and channelled, densely punctate. Prothorax: Apex feebly, base more decidedly bisinuate, sides widely bulging at posterior third, thence lightly converging to apex and more abruptly and subsinuately to base; front angles acute, hind rectangular, medial line shown by a short sulcus near apex and a smooth line on basal half; disc strongly, irregularly punctate, the postero-lateral punctures coarse, contiguous and subrugose, elsewhere the punctures becoming smaller, dense near apex, more distant towards base. Scutellum with about six small punctures. Elytra widening at shoulders, lightly compressed behind them, widest near middle, each strongly bidentate at apex, with long external spine; margins entire, seriate punctures large and round in four sutural rows, much smaller in the rest; intervals almost flat and impunctate throughout. Flanks of pro- and metasternum coarsely punctate, the middle areas much more finely so; abdomen glabrous with very fine shallow punctures. *Dimensions*: 15 × 5 mm.

Habitat.—Western Australia: Lake Grace (H. W. Brown).

This and the following species sent by that indefatigable collector, Mr. Horace Brown, add to an increasing group having wholly or almost wholly yellow elytra—Nos. 13–18 in my Revision (*Aust. Zool.*, 1931, p. 350). The above species is distinguished from all of these except *intacta* mihi, by its strong apical spines. From *intacta* it is distinct by its smaller size, flatter form, and very different prothorax. Holotype in Coll. Carter.

STIGMODERA (CASTIARINA) SUBNOTATA, n. sp.

Oblong-ovate. Head, pronotum, scutellum, appendages and underside—except abdomen—golden green (pronotum more golden than green), elytra and abdomen testaceous, the former with a small black postmedial spot on the seventh interval.

Head excavate and channelled, finely, closely punctate. Prothorax: Apex lightly, base more strongly bisinuate, sides moderately and nearly evenly rounded, widest at middle, all angles rather wide; discal punctures fine and dense on apical half, larger and more distant towards base, coarse near hind angles; medial line only indicated by smooth area near base. Elytra lightly enlarged

near middle, apices finely bidentate with small circular excision; margins entire, seriate punctures large and close; intervals finely punctate and nearly flat except at base and extreme apex. Underside glabrous, sternal regions finely and closely punctate, abdomen with dense shallow punctures. *Dimensions*: 11-12 × 4 mm.

Habitat.—Western Australia: Dedari (H. W. Brown).

Three examples sent (1 ♂, 2 ♀) are similarly coloured, with the two small spots varying slightly in size. It can thus be readily separated from Nos. 13-18 of my Revision or, if included amongst the species having spotted elytra, Nos. 39-53, it is entirely unlike any of these. Holotype in Coll. Carter.

STIGMODERA (CASTIARINA) INUSITATA, n. sp. Text-fig. 3.

Oblong, robust. Head and prothorax dark bronze, elytra red, with basal border, two fasciae and apical mark blue-black, abdomen yellow, the rest of underside black, mouth and legs blue, antennae green.

Head excavated and channelled; closely punctate. Prothorax widest near base, apex arcuate-emarginate, anterior angles acutely produced; base lightly bisinuate, posterior angles obtuse; sides rather gibbous at basal third, thence obliquely narrowed to apex and base; disc closely punctate; punctures small at middle, larger at base and sides, coarse near hind angles. Elytra very slightly widened at shoulders, scarcely compressed at middle; apices almost conjointly rounded, a minute divergence only apparent; subapical margins very finely serrate; striate-punctate, the strial punctures little evident; intervals very lightly convex at base and apex, elsewhere flat, in general with transverse wrinkles and a single row of large punctures. Underside with fine, close pubescence. *Dimensions*: 16-17 × 6 mm.

Habitat.—Western Australia: Lake Grace (H. W. Brown).

Two examples sent, one evidently ♂, are the only specimens I have ever seen, and have been recently discovered by the alert enthusiast who has done such wide entomological exploration in Australia. The form of the prothorax is much like that of *S. robusta* Saund.; the elytral fasciae wide as in *S. thomsoni* Saund., but their colour is more nearly black, the premedial fascia not extending to the sides; the apical mark is as in *S. audax* Saund., a broad, subapical arrow, produced in the middle to cover the apex. Holotype in Coll. Carter, the second example returned to Mr. Brown.

The following two recent captures of Mr. Horace Brown have just been received (13/10/32) and show the almost endless tale of species in this genus:

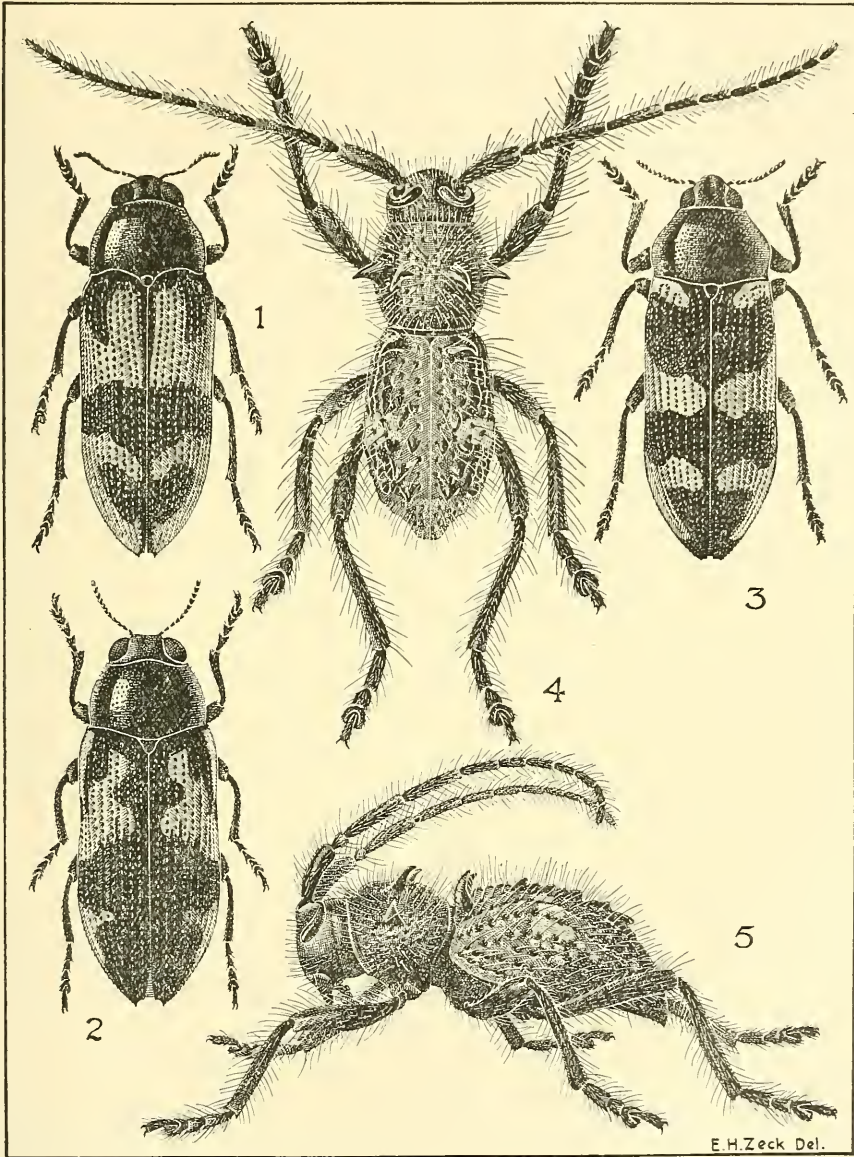
STIGMODERA (CASTIARINA) RADIANS, n. sp. Text-fig. 1.

Oval. Head, pronotum and antennae bronzy green; elytra yellow on basal half, red at sides and apical regions with blue markings as follows: wide post-medial fascia extending to sides, lunate preapical mark, suture throughout, and a wide basal band throwing off three branches, a sutural and two humeral, the last covering the shoulders and extending obliquely backwards; underside and legs dark green, moderately pubescent.

Head and pronotum closely, almost uniformly, punctate, the former channelled, the latter with smooth medial line on basal half. Prothorax moderately convex, apex and base bisinuate, the latter the more strongly; all angles acute; widest behind middle, sides lightly, arcuately converging to the front. Scutellum subcordate and concave. Elytra rather depressed and explanate, feebly obovate, well widened at shoulders, apices with small, very briefly bispinose, lunation, subapical margins almost entire (feebly serrulate as seen from beneath); striate-

punctate, striae punctures small, intervals strongly convex towards sides and apex, lightly so at middle and clearly punctulate. *Dimensions*: 11–13 × 4–5 mm.

Habitat.—Western Australia: Wembley (Mr. H. W. Brown).



Text-figs. 1-5.

- 1.—*Stigmodera (Castiarina) radians*, n. sp. 2.—*Stigmodera (Castiarina) magnetica*, n. sp. 3.—*Stigmodera (Castiarina) inusitata*, n. sp. 4.—*Microtragus discospinosus*, n. sp. 5.—*Saragus abnormis*, n. sp.

E. H. Zeck Del.

Two examples sent by this tireless hunter of the genus suggest in general form and coloration *S. delectabilis* Hope, or some examples of *S. septemguttata* Waterh. var. *tyrrhena* Blkb.; the humeral extension somewhat as in *S. tantilla* Obenb., but shorter. In my Revision (*Aust. Zool.*, 1931, p. 358) it would come under group ix near *anchoralis* L. & G. Holotype and paratype in Coll. Carter.

STIGMODERA (CASTIARINA) MAGNETICA, n. sp. Text-fig. 2.

Oval. Head, pronotum and underside coppery bronze (in one example with a suggestion of green), elytra testaceous with dark metallic-green bronze markings as follows: basal band throwing off three branches, two short, irregular, juxta-humeral marks parallel to but not extending to sides, a sutural branch expanding behind scutellum into a diamond-shaped mark and joining the wide postmedial fascia, this widest at suture and narrowing towards and meeting the sides; a large triangular apical mark covering, or not quite reaching, the apex. Underside rather strongly pubescent; legs dark green.

Head deeply excavate and channelled, strongly punctate, eyes unusually large and prominent. Prothorax rather strongly convex, widest at middle, sides well and evenly rounded, apex lightly, base more strongly bisinuate, anterior angles acute, hind angles subobtusate; disc closely rugose-punctate, more finely so towards middle, a smooth medial line traceable throughout, terminating near base in an elongate coppery fovea. Scutellum coppery, subcordate. Elytra lightly enlarged at shoulders, sides nearly straight; apices with a small, scarcely spinose, lunation; margins clearly serrulate on apical third; striate-punctate, the striae punctures small but distinct, intervals rather strongly convex on apical half, each with a single line of impressed punctures. *Dimensions*: 12 × 4½ mm.

Habitat.—Western Australia: Mount Magnet (Mr. H. W. Brown).

Two examples, the sexes, sent, that I name from its region, as also from its dark metallic colour. The general style of pattern is not unlike that of the preceding species, but the humeral mark leaves the shoulders uncovered, the post-scutellary mark is wider as also are the fascia and apical mark. These last three are connected along the suture. The apical mark is much as in *S. audax* Saund. The colour of the elytral pattern is a very dark olive-green that at first appears black, but in a good light its metallic gleams are evident. The short, widely rounded and convex prothorax, with its rugose sculpture is distinctive. Holotype ♂ and allotype ♀ in Coll. Carter.

STIGMODERA (CASTIARINA) BOOYANIA, n. sp.

Elongate-oblong. Head, thorax, underside and legs a rather brassy bronze (pronotum greenish here and there), antennae greenish, elytra yellow with violet-black markings as follows: wide basal margin, postmedial fascia (continuous to sides), nearly straight apical mark, the suture (widely throughout and forming an elongate diamond on basal two-thirds), and a short oblique, post-humeral mark.

Head excavate and channelled, interior margins of eyes parallel, irregularly punctate—closely at base, more sparsely on excavation, with laevigate area on vertex. Prothorax convex (subgibbous), widest at middle, apex subtruncate (slightly produced at angles), base lightly bisinuate, posterior angles produced and acute; sides evenly rounded; disc with smooth medial line, the punctures small, round and close on front half, larger near base, still larger and more sparse at sides with some smooth rugae. Scutellum scutiform, strongly concave. Elytra subangular near shoulder, sides subparallel (very lightly compressed near

middle), each apex with small, wide, shallow excision, margins subentire*; striate-punctate, all intervals convex throughout, strongly and closely punctate. Sternal regions with large, shallow punctures, abdomen densely and finely punctate. *Dimensions*: 15×5 mm.

Habitat.—Western Australia: Booyana, Norseman district (Miss A. E. Baisiou).

A unique specimen, labelled as above, has been sent for my inspection by Mr. F. E. Wilson. I cannot find any species that approaches it very closely. The figure of *S. propinqua* mihi (*Trans. Roy. Soc. S. Aust.*, 1916, pl. 10, f. 19) is rather near it, but this has a blue head, thorax and underside and the suture is not dark throughout. It is much larger than *S. bogania* mihi, with a quite different elytra and apical structure. The combination of subgibbous prothorax, convex and strongly punctured elytral intervals, oblong form, colour and pattern should render it clearly recognizable. The colour of the prothorax and its punctures is somewhat as in *S. undulata* Don., though differently shaped. Holotype in Coll. Wilson.

STIGMODERA (CASTIARINA) HILARIS Hope, var. INFASCIATA, n. var.

The freakish variations of the genus are again shown here. Two specimens taken by Mr. E. Sutton at Fletcher, S. Queensland, apparently belonged to an undescribed species, but a further consignment of seven included one that was identical with the typical *hilaris*. The others differ in the absence of the post-medial fascia, the scutellary green marking and, in some cases, of the preapical mark, with a prevailing orange ground colour. *S. hilaris* is not uncommon from Bulli to Victoria; but hitherto I have not seen examples from regions north of Sydney or variations from the typical pattern. It is thus desirable to give this variety a name. It may be considered as a local subspecies, but this term has been so much misused that I prefer to use the term variety.

CISSEIS SAPHIRA, n. sp.

The whole surface, including appendages, peacock blue (in one example of four, greenish), elytra with two indistinct pubescent fasciae, one extending in an irregular zig-zag across the full width at apical third, the other, very short, preapical.

Head channelled, scarcely excavate; densely and finely punctate. Prothorax: Apex and base strongly bisinuate, widest near base, sides arcuately narrowed to apex, all angles obtuse, the anterior depressed; upper carina continuous to apex, the lower just visible from above; disc with fine transverse strigae, especially near base and hind angles; two elongate depressions symmetrically placed on basal half. Elytra: Shoulders rather tumid, widest behind middle, subapical margins finely serrulate, surface with fine silky scales; underside glabrous, nitid and finely punctate. *Dimensions*: $5-6 \times 2\frac{1}{2}$ mm.

Habitat.—Western Australia: Moore River (H. W. Brown).

Four examples examined show a short, rather wide species that, by colour, can only be confused with (*a*) *pulchella* Cart. from N. Queensland, and (*b*) *westwoodi* L. & G. from Victoria and New South Wales, but (*a*) is larger, with brilliant coppery head and prothorax and sides of prothorax nearly straight, (*b*) is narrower and more elongate, golden green in colour with differently placed pubescence. Type series in Coll. Carter.

* The faint crenulations, discernible through a binocular, are merely the result of the coarse punctures of the intervals, not serrations as seen, for example, in *S. cupricollis* Saund.

PARACEPHALA BROWNI, n. sp.

Subcylindric. Head and thorax dull black with metallic gleams. Elytra subnitid blue (sometimes purplish); underside and appendages bronze. Upper surface with sparse, recumbent white hair, more evident on head.

Head convex, clypeus triangularly excised, forehead with fine medial sulcus. Prothorax: Apex subtruncate, base strongly bisinuate, sides subparallel, anterior angles depressed and rounded off, posterior subrectangular. Disc densely rugose-punctate, a sinuous transverse depression across middle. Elytra finely granulose-punctate, with some faint subobsolete costae, apices separately rounded and finely serrulate. Dimensions: 5-7 × 1½-2 mm.

Habitat.—Western Australia: Merredin (H. W. Brown).

Five examples sent show a species allied to *P. cyaneipennis* Blkb., but distinguished by the more sombre colour of head and thorax, the different blue of the elytra and its different sculpture, with a finer silky surface. Blackburn's species, moreover, shows no sign of costae. Type-series in Coll. Carter.

Family TENEBRIONIDAE.

COTULADES SQUAMOSUS, n. sp.

Brown, opaque, thickly clad with reddish squamose derm. Underside dark brown, with evenly spaced setiferous punctures, each bearing a short adpressed red hair.

Head rounded in front, covered with coarse recumbent scale-like hairs; eyes coarsely faceted, antennal orbits raised, antennae very wide, 1-3 equally wide, larger and longer than the succeeding, 4-8 gradually and slightly diminishing in width, 9-10 wider than 8, sharply angulate at apices, 11 considerably narrower than 10 and round. Prothorax wider than head, convex, apex subtruncate, sides widest at middle, thence sinuately converging behind and arcuately to the apex, crenulated by lateral scales, all angles obtuse, base rounded and slightly produced backwards in the middle; surface uneven, discal area raised in front and behind, and by more or less parallel ridges on each side of, a central depression, this almost devoid of scales. Elytra obovate, subdepressed; at its widest much wider than prothorax, with the suture raised and each with three wide subcostate ridges, each interval between ridges with about three large depressions similar to that on pronotum. *Dimensions*: 4½ × 2 mm.

Habitat.—Victoria: Otway Brush Forest (F. E. Wilson).

Two examples taken by Mr. Wilson. A wide, densely squamose species, nearest to *C. tuberculatus* Cart., but differing in clothing, less prominent tubercles and flatter form. Holotype in Coll. Wilson.

COTULADES TENUIS, n. sp.

Narrowly ovate, convex, rusty brown; the darker ground surface sparsely clothed with brown derm; appendages paler; the unabraded part of surface showing fascicles.

Head rounded in front, sides gradually converging behind, thickly, not contiguously, punctate; antennae relatively longer than in *C. fascicularis*, segments 1-3 longer than the rest, the first widest, 4-8 subequal, 9-10 wider than preceding, strongly transverse, 11 narrower than 10. Prothorax convex, oblong-ovate, slightly longer than wide, produced in middle at apex and base, front angles wide but recurved, hind angles obsolete, surface closely and coarsely punctate, some white fascicles near apex and sides. Scutellum not visible. Elytra closely fitting and of same width as prothorax at base, soon widening behind

this, rather narrowly tapering to apex; three little raised costae traceable on basal half of each, intervals foveate-punctate with some seriate arrangement, but largely hidden by derm; a few individual fascicles standing upright at sides and apex. Legs with uneven surface due also to fascicles. *Dimensions*: 4×1.5 mm.

Habitat.—Victoria: Warburton District (Mr. F. E. Wilson).

A species distinct from the three recorded, not only by its different sculpture but especially by the narrower form of both prothorax and elytra. Holotype in Coll. Wilson.

(?) *COTULADES ABNORMIS*, n. sp.

Narrowly ovate; subnitid black, somewhat obscured in parts by brown derm, upper surface with sparse long upright yellow hair, chiefly on elytra, legs brown.

Head subquadrate, truncate in front, canthus well raised, eyes large and coarsely faceted, surface uneven through the presence of tubercles. Antennae coarsely submoniliform, the two basal segments larger than rest, 3-8 subequal, 9-10 wider than preceding and subconic, 11 smallest. Prothorax convex, about as wide as long, apex subtruncate, base rounded—produced in middle—widest at apex thence lightly narrowing to base. Surface longitudinally corrugated by lines of tubercles, of which the middle three form continuous costae. Scutellum just perceptible. Elytra wider than prothorax at base, regularly ovoid, widest at middle; surface sulcate-punctate, the punctures (where discernible) subfoveate, more or less filled with flocculence, the raised intervals nitid, more or less uniform at middle, at sides broken up into tubercles. Legs subglabrous and nitid. *Dimensions*: 4×1.5 mm.

Habitat.—South Australia: Adelaide (Hart, 1886) in British Museum.

A single example sent by Mr. K. G. Blair is labelled as above. While differing from its congeners in its longer antennae, more coarsely faceted eyes, and its distinct sculpture, it presents so many affinities with the former species that for the present it may be classified as above. Holotype in the British Museum.

COTULADES ALPICOLA, n. sp.

Brownish-black; antennae brown, upper surface sparsely clothed with red bristly hair, subrecumbent on head and pronotum, in part erect on elytra.

Head wide, truncate in front, depressed on vertex, rugose-punctate, antennal segments 1, 2 very stout, 3 slightly narrower than preceding but longer than 4, 4-8 subequal, 9-10 trapezoidal, clearly wider than 8, 11 subspherical, narrower than 10. Prothorax as wide as head at its widest, subtruncate at apex and base, but the anterior angles clearly, though briefly, advanced; sides parallel and coarsely crenulate; surface asperate and rugose. Elytra wider than prothorax at base, ovate, relatively narrower than *C. leucospila* Hope; striate-punctate, the suture and three rows of tubercles raised above the general surface, the intervening space containing rows of subfoveate punctures, with small tubercles and coarse setigerous clothing. Underside unevenly rugose-punctate. *Dimensions*: 3×1 mm.

Habitat.—New South Wales: Mt. Kosciusko, 5,000 ft. alt. (the late Dr. E. W. Ferguson).

Of a similar form to, but even smaller than, *C. tenuis*, but clearly separated by coarser clothing, parallel-sided prothorax, and wider antennae. *C. leucospila* Hope (= *fascicularis* Pasc.) is larger, with white fascicles forming a pattern on the pronotum, and without the large seriate punctures on elytra. Holotype in the Ferguson Coll., Museum of Division of Economic Entomology, Canberra.

C. pilosus Oke, recently published with a brief description, is apparently distinct from the above by (1) black setae of upper surface, also with certain white setae, including two white spots on elytra, (2) antennae with "third segment widest". The white marks are apt to get obliterated in specimens of the genus, but the striking difference of antennal structure seems decisive.

C. leucospila Hope = *C. fascicularis* Pasc.—I am indebted to Mr. K. G. Blair for this information, after a comparison of the types. This synonymy has not, I think, been previously recorded.

The seven species of *Cotulades*, excluding *pilosus* Oke, which I have not seen, may be tabulated as follows:

- | | |
|---|---------------------------|
| 1. Sides of prothorax quite or nearly straight | 2 |
| Sides of prothorax widely arcuate | 5 |
| 2. Antennae with 2 basal segments larger than rest | <i>abnormis</i> , n. sp. |
| Antennae with 3 basal segments larger than rest | 3 |
| 3. Antennal segments moniliform and narrower | <i>tenuis</i> , n. sp. |
| Antennal segments transverse and wider | 4 |
| 4. Elytra with large seriate punctures | <i>alpicola</i> , n. sp. |
| Elytra without such | <i>leucospila</i> Hope |
| 5. Pronotum and apical declivity of elytra coarsely tuberculate ... | <i>tuberculatus</i> Cart. |
| Pronotum and apical declivity of elytra not so | 6 |
| 6. Elytral sculpture hidden beneath squamose derm | <i>squamosus</i> , n. sp. |
| Elytral seriate punctures distinct | <i>montanus</i> Blkb. |

Platydemia heroni Cart., described from Dorrigo (These Proc., 1929, p. 73), has been sent me since then by Mr. J. Armstrong, Bogan River, found in old bird's nest; also from Mr. Sutton, Fletcher, S. Queensland, in a similar habitat.

Mr. Jarvis (of the Queensland Department of Agriculture, Stanthorpe) has found it in the nest boxes of finches in an aviary.

ENNEBOEUS GLABER, n. sp.

Elliptic; castaneous, nitid and glabrous, head and underside red-brown, the former subfusate; elytra a little clouded towards apex.

Head rather strongly punctate; antennae: 3-6 oval, 7 triangular, 8-10 increasingly transverse, cupuliform, 11 largest and round. Prothorax transverse, widest at middle, apex and base lightly bisinuate, sides arcuate, anterior angles rounded off, the posterior subrectangular; surface coarsely, irregularly punctate. Scutellum oval, concave. Elytra closely fitting to and a little wider than prothorax, everywhere rather thickly and coarsely punctate, without seriate arrangement, the punctures larger than on pronotum. Legs short and stout, hind tarsi with fourth segment equal to the first. *Dimensions*: 4 × 2 mm.

Habitat.—N. Queensland: Cairns, on sea beach (H. Hacker).

A single example in the Hacker Collection of the Berlin Museum clearly differs from *E. ovalis* Waterh., and *E. australis* Champ., in colour, absence of pubescence, and antennae. In *ovalis* and *australis* segments 9, 10, 11 are said to form a distinct but not large club, whereas in *glaber* 8-11 are clearly clavate. It cannot be *fossoris* Oke, which has spinose tibiae and is doubtfully a member of the genus. Holotype in Berlin Museum.

PTEROHELAEUS CASTANEUS, n. sp.

Oval; nitid, dark castaneous above and below, foliate margins, antennae, palpi and tarsi pale red.

Head rather flat, deeply sunk in prothorax, epistoma widely arcuate, its sides little raised, surface densely, finely punctate. Antennae: segment 3 as long as 4-5 combined, 7-11 successively widened, the apical largest. Prothorax widest near base, thence arcuately narrowed to front, and very slightly to the subacute

hind angles; apex arcuate-emarginate, anterior angles well rounded, base feebly bisinuate, foliate margins wide and horizontal; disc with fine, shallow, scattered punctures, the medial channel distinct, also two wide shallow basal impressions. Scutellum arcuate-triangular, laevigate. Elytra as wide as prothorax at base, widest near middle, foliate margins as wide as those of prothorax, subundulate, and a little concave, narrowed at apex; seriate-punctate, scarcely striate; the seriate punctures comparatively large, though varying in size, smaller in the two sutural rows and in general so towards apex; intervals smooth and flat, a row of larger punctures at junction with foliation; the fifth interval showing a tendency to widening and feeble elevation. Prosternum sharply carinate, underside nitid and almost impunctate, abdomen finely striolate. *Dimensions*: $12 \times 7\frac{1}{2}$ mm.

Habitat.—New South Wales: Mount Irvine (the author), Hornsby (C. Gibbons).

I have long had a single example that would not fit any recorded description, the colour suggesting immaturity; but the two specimens from Hornsby in the Australian Museum are identical in colour, form and sculpture with this. I have thus no longer any hesitation in describing it as a distinct species, nearest *P. rubescens* Cart., but smaller, with finer elytral sculpture; *rubescens*, moreover, has the intervals raised. *P. dispersus*, of the black species, is somewhat like it in form, but with smoother head and pronotum and larger seriate punctures of the elytra, with irregular punctuation of the basal area—quite absent from *castaneus*. Holotype in Coll. Carter.

PTEROHELAEUS TENUICOSTIS, n. sp. Text-fig. 6.

Oblong, convex; opaque-black above, subnitid black beneath, legs brown, antennae and tarsi rufescent.

Head concave, with reflexed margins, epistoma arcuate, surface thickly and unevenly punctate; antennae with segment 3 shorter than 4-5 combined, 4-7 subconic, 8-10 rounded and transverse, 11 oval. Prothorax widest near base, thence arcuately narrowed to front, and briefly so to base; apex widely, not deeply emarginate, anterior angles widely rounded off and raised, base feebly bisinuate, posterior angles acute and subfalcate, foliate margins wide, subconcave and undifferentiated from disc by sculpture; disc towards sides subasperate with shallow punctures; these tending to disappear near middle; in one example a clear medial channel seen on anterior half, subobsolete in the second example. Scutellum arcuate-triangular, its surface asperate. Elytra rather wider than prothorax at base and thrice as long as it; subparallel for the greater part and strongly convex; foliate margins narrow but of uniform width to apex; each with seven very thin, sharp, little-raised costae, of which the first and seventh are not very evident, the fourth and sixth with a slight tendency to crenulation and towards apex to become nodulose; in the basal area each interval with an extra costa—intervals between main costae with two rows of small punctures, these becoming indistinct towards sides; a row of large punctures at sides and some irregular punctures in the scutellary region. Submentum and prosternum rugose-pustulose; sides of mesosternum rugose, epipleurae pustulose, abdomen punctate and striolate, legs coarsely punctate, the apices of tibiae and undersides of tarsi strongly pubescent. *Dimensions*: 18×9 mm.

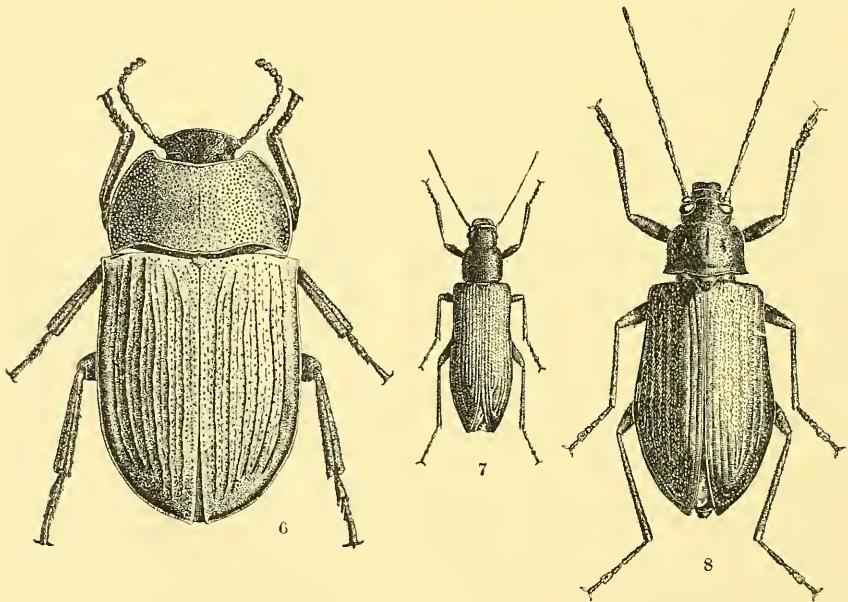
Habitat.—Queensland: Coomooboolaroo Station (Rockhampton District) (J. R. Slevin).

Two examples in the Australian Museum are very distinct from others of Macleay's Section ii, Subsection i. It is nearest, but not closely allied to, *P. elongatus* Macl. The combination of oblong, convex form, opaque surface, and finely costate elytra makes it easy to identify. Holotype and paratype (K 61089) in Australian Museum.

SARAGUS ABNORMIS, n. sp. Text-fig. 5.

Elongate-ovate, rather flat, opaque brown; unabraded areas with bristly hair.

Head: Clypeus subtruncate in front, its sides meeting the canthus at a wide angle; surface closely granulose, epistomal suture deeply impressed, terminating in deep foveae; antennae strongly ciliate, segment 1 stout, 2 very small, 3 much longer than 4; 5-8 successively shorter, 9-11 enlarged. Prothorax: Apex strongly arcuate-emarginate, the acutely produced anterior angles almost concealing the eyes; base bisinuate, much wider than apex; widest behind middle, sides lightly converging behind, more strongly to the front, without sinuation; posterior angles subrectangular; margins with moderately wide foliation, a little obliquely raised, without defined border; disc uniformly, densely granulose. Scutellum small. Elytra of same width as prothorax at base, slightly widening behind middle, lumeral angle rather pronounced, a narrow horizontal margin extending a short way beyond shoulder; surface irregularly costate as follows: a vague subundulate costa on each side of and close to suture, more evidently raised at base and apex, the suture itself costate towards apex; a second costa starting from base meeting a third costa originating behind shoulder at the apical declivity, and thence continued by a fragmentary costa not extending to apex; between the third costa and margin a line of costulose tubercles; the interspaces between costae subsperate, the extreme border—as with prothorax—subserrulate from bristly derm.



Text-figs. 6-8.

6.—*Pterohelaus tenuicostis*, n. sp. 7.—*Anaxo tenuicornis*, n. sp.

8.—*Homotraxis albolincatus*, n. sp.

Prosternum and epipleurae granulose, abdomen finely rugose. Front tibiae spinulose on exterior margin, enlarged and bispinose at apex. *Dimensions*: 12 × 6 mm.

Habitat.—Mitchell (? Victoria River, N.T.).

A single example in the Australian Museum bears a label with the simple word "Mitchell". Mr. Musgrave informs me that this is probably in the vicinity of the Victoria River, N.T. The form of the prothorax is somewhat like that of *Dysarchus* and the elytra are flatter than usual with *Saragus*, but the eyes are not divided, while the tibiae are without the characteristic spine of *Dysarchus*. Type K 34307 in Australian Museum.

ONOSTERRHUS OBESUS, n. sp.

Elongate-obovate. Nitid black above and below, antennae piceous red, its basal segments and the tarsi red; tibiae and tarsi clothed with red tomentum.

Head: Labrum prominent, epistoma truncate, sinuate at sides making a wide angle with the obliquely raised canthus; impunctate; antennae extending to basal third of prothorax, segment 3 as long as 4-5 together, 3-8 more or less elongate, 9-10 round, 11 ovoid. Prothorax 5 × 8 mm., widest near middle, apex emarginate, front angles rather wide and blunted at the tips, base feebly bisinuate, the dentate posterior angles produced, twisted obliquely outwards; sides moderately rounded, sinuate behind, the edges thickened, raised and channelled within; disc impunctate. Elytra very convex, wider than the prothorax at base, about as long as wide (11 mm.), widely rounded at shoulders, apical declivity steep, a narrow horizontal margin, just visible from above, bearing a row of large punctures; disc very minutely and sparsely punctate, each with three subobsolete costae traceable and some vague unevenness and shallow wrinkles. Metasternum and abdomen with longitudinal strigae, teeth of submentum bluntly enlarged and obliquely raised. *Dimensions*: 19-20 × 10-11 mm.

Habitat: South Australia; Murray River (A. H. Elston).

Two examples have been in my cabinet for some years labelled *O. stephensi* var., but the following comparison will serve to distinguish these allied species:

<i>O. obesus</i>	<i>O. stephensi</i> Cart.
<i>Form</i> : more convex and obovate	less convex and ovate
<i>Surface</i> : more nitid and uneven, elytral costae traceable	opaque and more even, no sign of costae
<i>Prothorax</i> : narrower, its raised border less thick	wider, more rounded at sides, border thicker
<i>Submentum</i> : teeth smaller and sloping forward	teeth larger and vertical
Holotype in Coll. Carter.	

ONOSTERRHUS POLITUS, n. sp.

Widely ovate; very nitid black above and below, antennae and tarsi reddish.

Head: Episterna concave in front, its margin well raised, almost rectangular at the corners, at sides making a wide angle with the antennal sockets, these rounded and raised; forehead minutely punctate; with medial longitudinal impression. Underside of head impunctate, tooth of submentum small. Prothorax 4 × 7.5 mm., apex arcuate-emarginate, its angles acutely produced and pointing forward; base bisinuate, widest behind middle, sides sinuate in front and behind, more widely so in front; lateral border very wide and convex, deflexed at hind

angles, channelled within; disc polished and impunctate. Scutellum strongly transverse. Elytra rather wider than long (9×10 mm.), very convex, its narrow horizontal margin only seen from above near shoulders; nitid and impunctate, showing traces of subobsolete costae. Prosternum and sides of abdomen longitudinally wrinkled. Posterior legs wanting. *Dimensions*: 15×10 mm.

Habitat.—North-West Australia (in National Museum).

A single example, slightly mutilated as to legs, is so distinct as to merit description. In my table of the genus (*Ann. Q'land Mus.*, 1911, p. 7) it would stand next to *O. rotundata* Blkb., which is a larger species with much less prominent front angles to the pronotum. Holotype in the National Museum.

BYALLIUS OBERONIUS, n. sp.

Elongate-ovate; dull black above and beneath, oral organs and antennae reddish-brown, tarsi and apex of tibiae with red tomentum.

Head densely and finely punctate, labrum prominent, epistoma truncate, forming a right angle with the raised canthus, antennae having segment 3 as long as 4-5 combined, 4-8 successively widened, 9-10 spheroidal, 11 ovoid. Prothorax (4×6 mm.) widest near base, apex arcuate-emarginate, anterior angles acute, produced obliquely outward, base wider than apex, truncate, posterior angles obtuse, scarcely dentate, sides well rounded, with short sinuation behind and a longer one towards the front angles, revolute border thick, round, and channelled within; surface finely and closely punctate with an obvious but fine medial impression on middle half, terminating behind in a light wide triangular impression; this continued transversely parallel to base. Elytra ovate, narrower than prothorax at base, shoulders roundly widened, widest near middle, surface very uneven, irregularly costate-reticulate, each with three irregular costae, intervals with well defined raised reticulation, depressed parts finely punctate; suture also widely raised, extreme border unseen from above. Underside coarsely punctate, the prosternum also transversely rugose, the abdomen longitudinally so except on apical segment, this densely punctate. *Dimensions*: $16-18 \times 7-8$ mm.

Habitat.—New South Wales: Hazelgrove, Oberon District (F. H. Taylor and Consett Davis).

Seven examples before me show no external sexual distinction. It is nearest to *B. angustatus* Cart. in elytral sculpture, and to *B. ovensensis* Cart. in its rounded pronotum, but with the strongly thickened recurved border of the former species. The elytral reticulations are more strongly defined than in any other of the genus. Holotype in Coll. Carter.

The genus *Byallius*, not only by sculpture, but especially in the form of the mentum, submentum, prosternum and long metasternum, is clearly more allied to *Nyctozoilus* than to *Cardiothorax*, near which the author placed it. The submentum is characterized by its wide, generally rough, surface, divided medially at the base by a nitid triangular plate. The species are in some cases closely allied and are very local. They may be separated into two groups by the elytral sculpture:

Group A.—Species having defined raised reticulations, as in *Nyctozoilus reticulatus* Bates.

Group B.—Species having the intervals between costae variously punctate, rugose, or vermiculate, without closed reticulations.

B. reticulatus is unfortunately named since it comes clearly in Group B. Four species have been added since my former table was published (*These Proc.*, 1919, p. 159), so that the following amended tabulation is desirable:

Byallius.

1. Elytral intervals with pronounced reticulations 2
Elytral intervals without defined reticulations 7
2. Pronotal outline irregular (subcrenulate) 3
Pronotal outline entire 4
3. Pronotal border thick, raised, its hind angles obtuse without preceding sinuation *laticollis* Cart.
Pronotal border less thick and raised, hind angles dentate with preceding sinuation *andersoni* Cart.
4. Pronotum widely concave within border 5
Pronotum without appreciable concavity *kosciuskoanus* Cart.
5. Pronotum with defined medial canal *oberonius* n. sp.
Pronotum without canal 6
6. Sides of prothorax well rounded, front angles pointing a little outward *oveusensis* Cart.
Sides of prothorax little rounded, front angles pointing forward .. *angustatus* Cart.
7. Pronotum subnitid, elytral costae little raised *reticulatus* Pasc.
Pronotum opaque, elytral costae well raised 8
8. Elytral intervals foveate-punctate *mastersi* Cart.
Elytral intervals not so 9
9. Pronotal border thick and well raised (*Styrus*) *revolutus* Cart.
Pronotal border little thickened or raised *punctatus* Cart.

Lypros atronitens Fairm.—When examining some Tenebrionidae belonging to the Australian Museum I was astonished to find an example of this species which had been received from Mr. W. Heron, taken at East Dorrigo, New South Wales. It is surprising that a common New Guinea species should occur so far south in Australia, having hitherto escaped notice in the more northern regions of the continent. There is no reason to doubt the evidence of this distribution. This is the first Australian record of the genus (vide my note under *Pseudolypros australiae* Cart., These Proc., 1930, p. 538).

Chariotheca striato-punctata Macl. = *C. doddi* Cart. (var.).—Mr. Blair has called my attention to the probability of this synonymy. After a close re-examination of my type I must confess that it is too close for specific distinction from the older Macleay species, though shorter and rather wider in form than the examples before me of this.

MENEPHILUS ARMSTRONGI, n. sp.

Oblong; pitchy black, elytra reddish-brown subnitid, glabrous and more nitid beneath; oral organs, antennae and tarsi red, tibiae and femora reddish in parts.

Head depressed, clypeus rounded in front, not raised at sides; coarsely and closely punctate; antennae short, its four apical segments transverse. Prothorax: Apex emarginate, anterior angles sharply produced (as in *M. rectibasis* Cart.), base truncate, posterior angles obtuse and well defined; sides lightly rounded, converging towards apex; a narrow horizontal margin, scarcely sulcate within, disc strongly punctate, the punctures more distant than on head, becoming finer at middle, a light elongate depression at base on each side near hind angles. Scutellum transversely oval, punctate. Elytra rather wider than prothorax, subparallel, striate-punctate, the three striae near suture deeper than the rest and containing smaller punctures, the outer striae shallow with larger punctures, intervals wide and very little raised. Underside of head with strong, confluent punctures, prosternum transversely rugose, its episterna finely pustulose; metasternum and abdomen strongly, but not closely, punctate; anal segment clearly margined. Femora tumid, hind femora with wide triangular enlargement near apex. *Dimensions*: $8 \times 2\frac{1}{2}$ mm.

Habitat.—New South Wales: Nandewar Ranges (J. Armstrong).

Mr. Armstrong took two examples on our recent (November, 1932) trip to this region, of which he generously gave me one. It is clearly distinguished from *M. humilis* Er., by small size and glabrous sternum; from *M. colydioides* Er. (which it most resembles) by the less nitid surface, more finely punctate pronotum, wider and less convex elytral intervals, besides colour differences. *M. rectibasis* Cart., is easily distinguished by its very nitid black surface, the fine sculpture and sulcate margins of pronotum, and the deep striae and sharp intervals of elytra. Holotype in Coll. Carter. Paratype in Coll. Armstrong.

OLISTHAENA SPARSA, n. sp.

Ovate, very convex; brilliantly nitid brown-bronze above and below, antennae and tarsi red.

Head: Labrum prominent, clypeus subtruncate, eyes large, widely separated; antennae rather short, segments 3–6 sublinear, 3 longest, 7–10 very little widened, 11 ovate, longer than 10; surface of head and pronotum smooth and impunctate. Prothorax strongly transverse, broadly emarginate at apex, its angles subacute, extending to half the eye, base strongly bisinuate, posterior angles acute and falcate; widest at base, sides obliquely narrowed on basal half, thence arcuately so to the front, a narrow raised border at sides enclosing the front angles, a transverse depression near base, interrupted in middle, terminating in large fovea near sides. Scutellum triangular. Elytra wider than prothorax, gibbous in front of middle, a narrow lateral gutter throughout; surface with large, sparse punctures, irregular in size and arrangement, those nearest suture smaller, elsewhere foveate, but obsolescent on apical declivity. Underside as brilliant as the upper and impunctate, save for a few large punctures on flanks of mesosternum. Legs moderately long, hind tibiae a little flattened and widened in middle, post tarsi with basal segment about as long as the apical. *Dimensions*: 11 × 6 mm.

Habitat.—Queensland: McPherson Range (H. Tryon).

A unique specimen in the Queensland Museum is difficult to place, its slender antennae and gibbous elytra distinguishing it from other members of the genus, but it would be still more out of place in other genera of the subfamily. The elytral sculpture is somewhat as in *Prophanes mastersi* Macl., on a smaller scale. Holotype in Queensland Museum.

EUTOREUMA TURNERI, n. sp.

Elongate-ovate, convex; nitid metallic greenish-bronze above, nitid black beneath, legs black, antennae, tarsi and palpi red; basal segments of antennae infusate.

Head: Clypeus convex, forehead abruptly rising from the suture, eyes large, rather close, interspace about the diameter of one eye; surface finely punctate, antennae very slender, not extending to base of prothorax, 3–6 lineate, 7–10 submoniliform, slightly successively increasing in size, 11 largest, oval. Prothorax: Apex deeply emarginate, the acute—but not sharply pointed—front angles extending beyond the eyes; base bisinuate, sides arcuately narrowed from base to front, with thin raised border and moderate foliation, disc with minute and dense system of punctures, two small foveae near middle, two basal foveae, the area between these also lightly depressed. Scutellum triangular. Elytra slightly wider than prothorax at base, oblong, subparallel, convex, but scarcely gibbous, lateral border not visible from above; surface unevenly embossed, the irregular raised areas nitid and laevigate, the depressed areas with irregular clusters of

small, brilliantly coppery punctures, continued sparsely to the apex. Pro- and mesosternum and abdomen striolate, metasternum sublaevigate; tibiae of ♂ rather strongly curved and pubescent beneath, of ♀ straight without pubescence. *Dimensions*: ♂, 12 × 5 mm., ♀, 13 × 6 mm.

Habitat.—Queensland: Eungella (Dr. A. J. Turner).

A pair—the sexes—of this fine insect is clearly congeneric with *E. cupreum* by similarity of form, sculpture, and slender antennae. The brilliant punctures with the more sombre embossed areas give a special character to the species, which I gladly name after an old friend, its discoverer. Holotype and allotype in the Queensland Museum.

ANDROSUS HACKERI, n. sp.

Oblong-ovate; convex; nitid, head and prothorax black, elytra violaceous, antennae and legs dark, the base of the former and the tarsi red.

Head and pronotum closely, not coarsely, punctate. Antennae gradually widening from segment 5; 7–10 cupuliform, 11 round. Prothorax strongly transverse, widest a little in front of middle, thence arcuately narrowed anteriorly, and subrectilinearly to the base; apex and base lightly bisinuate, anterior angles moderately produced and obtuse, the undentate posterior angles also rather wider than 90°; a wide raised lateral border with a row of large punctures immediately within it; front and hind margins without such border. Elytra convex, of nearly same width as prothorax at base, slightly widening beyond middle; seriate-punctate, the seriate punctures small and well separated in sutural rows, rather larger towards sides, the series extending clearly to the extreme apex; intervals flat. Prosternum densely and coarsely punctate, its process bisulcate with large irregular punctures; episterna and epipleurae with large, sparse punctures; abdomen with finer punctures, except near hind coxae. *Dimensions*: 6 × 2½ mm.

Habitat.—Cape York: Coen District (H. Hacker).

A single example in the Hacker Collection of the Berlin Museum is nearest to *A. brevis* Cart. amongst Australian species, and to *A. violaceus* Pasc. amongst New Guinea species, but differs from both in its black head and prothorax. Holotype in the Berlin Museum.

ADELIUM FLAVITARSIS, n. sp.

Rather widely ovate, depressed; head and pronotum very nitid black with purple sheen; elytra brilliant metallic-purple in one example, dark violaceous or cyaneous in the other two, prosternum, epipleurae and legs red, abdomen black; palpi and tarsi yellow, antennae brown, with basal segments sometimes red.

Head sparsely but clearly punctate, forehead with two large foveae between the eyes, antennae stout, not extending to base of prothorax, segment 3 shorter than 4–5 combined, 3–6 moniliform, 7–10 cupuliform and successively widened, 11 largest, ovate. Prothorax transverse, widest at middle, apex arcuate, anterior angles obtuse, base subtruncate, sides moderately rounded, subsinuate before the defined but obtuse hind angles; extreme border narrowly raised throughout, explanate margins defined, on anterior half by a short sulcus; disc indistinctly and minutely punctate, a fine medial channel clearly impressed, not quite extending to apex or base; a few ill-defined ridges, the most obvious being one obliquely directed forwards from the posterior angles. Scutellum triangular. Elytra slightly wider than prothorax at base and about twice as long as it; ovate, shoulders well defined, a narrow border visible from above throughout; sulcate, the sulci nearest suture more or less entire, the external sulci irregularly interrupted, in

some cases forming elongate foveae with cancellate transverse ridges, without perceptible seriate punctures; intervals convex, nitid and impunctate. Under-side very nitid, vaguely punctate on prosternum and epipleurae; fore tibiae lightly curved, post intercoxal plate truncate. *Dimensions*: 11-12 × 4½-5 mm.

Habitat.—Australia (Kraatz).

Three examples in the Berlin Museum sent for determination are very distinct from all described species by brilliant colour, the sulcate elytra and absence of seriate punctures (*A. striatum* being the only other sulcate species). The elytral sculpture is nearest that of *A. ruptum* Pasc. The difference of colour in the specimens is not, I think, sexual, since all three are probably male. *A. flavicornis* Cart. has similarly coloured tarsi, but is widely different otherwise. It is regrettable that the attached labels only bear the words "Australien" and "Kraatz". Holotype in the Berlin Museum.

SEIROTRANA SUTTONI, n. sp.

Ovate; nitid dark bronze, tarsi red.

Head coarsely, irregularly punctate, forehead with a short medial sulcus besides the usual stirrup-shaped impression. Antennae submoniliform, the two penultimate segments transverse, the 11th largest, ovoid. Prothorax: Apex arcuate-emarginate, base truncate, sides moderately rounded, widest at middle, lightly sinuate behind, anterior angles rather strongly produced and acute, posterior rectangular, not dentate; margins with a slight tendency to crenulation, extreme border narrow; disc closely and irregularly punctate with a few rather vaguely defined larger punctures. Elytra oval, wider than prothorax at base, striate-punctate, seriate punctures small near suture, larger towards sides; alternate intervals with inconspicuous nodules, except on the 7th and towards apex; the 3rd and 5th only irregularly convex; about four large punctures on the 1st and 3rd, and some minute pustules perceptible on the 4th and 6th. Epipleurae punctate, prosternum transversely wrinkled, abdomen sublaevigate save for the longitudinal strigae behind the post intercoxal plate (found in several other species). *Dimensions*: 9-11 × 3.5-4.5 mm.

Habitat.—Queensland: Stanthorpe (E. Sutton).

Four examples differ from *S. acuticollis* mihi (also from Stanthorpe) widely in the wider, narrowly bordered prothorax, coarser ground sculpture, and less numerous and defined larger punctures. In common with *S. anomala* mihi, it possesses characters of both Groups I and II of my revision, though most closely allied to species of Group II. In form nearest, though less wide than, *S. repanda* Pasc., its elytral sculpture is nearest *minor* mihi of Group I. Holotype in Coll. Carter.

SEIROTRANA FUNEREA, n. sp.

Oblong-ovate; opaque black above, nitid dark bronze beneath, antennae and tarsi dark brown.

Head densely punctate, antennal segments 4-8 oblong conic, the two penultimate transverse and triangular, 11th large. Prothorax: Apex arcuate-emarginate, base subtruncate (feebly concave), sides very lightly rounded, widest before middle, sinuate and converging behind; anterior angles wide, posterior defined but undentate and obtuse; margins finely crenulate, a narrow external border, disc closely strigose-punctate, a large depression on each side, with declivous lateral foliation having transverse strigae. Elytra convex, wider than prothorax at base, shoulders rounded, a narrow raised border from above seen

only on basal half; striate-punctate, the seriate punctures small, the odd intervals, including the sutural, with short studs (catenulations) regular in size, those on the sutural small and opaque, with a puncture between each pair, those on the 3rd, 5th, 7th, 9th larger and nitid; the even intervals bearing minute pustules. Epipleurae with large, sparse punctures, prosternum coarsely, irregularly punctate, abdomen sublaevigate. *Dimensions*: 11 × 4.5 mm.

Habitat.—Queensland National Park (R. Illidge).

A single example, sent by my old friend, is distinct from the other black species of Group I. It is separated from *S. catenulatus* Boisd., by smaller size, much finer and closer sculpture of pronotum and less strongly crenulate margin; from *S. carbo* mihi by its more opaque surface, the small seriate punctures of elytra and generally impunctate intervals; and from both in having the small catenulations on the sutural interval. Holotype in Coll. Carter.

SEIROTRANA MONTICOLA Blkb. var. STRIGIVENTRIS, n. var.

I have two examples of Blackburn's species from Mt. St. Bernard (Victorian Alps) that show the strong sexual characters described. Two other examples, taken by myself at Mt. Kosciusko in 1906 and 1926 respectively, may be later found to be distinct from *monticola*, but, having many characters in common, may for the present be named var. *strigiventris*. The chief differences are as follows:

<i>monticola</i> Blkb.	var. <i>strigiventris</i> .
<i>Dimensions</i> : 11.5 × 5 mm.	9 × 4 mm.
<i>Prothorax</i> .	All angles more sharply defined.
<i>Elytral intervals</i> 2, 4, 6, wide, 2 and 6 with a few large punctures.	2, 4, 6 very narrow, 2 and 6 without punctures.
<i>Apical segment of abdomen</i> "valde carinato", apex not excised.	Lightly ridged, rather than carinate, apex with triangular excision.

In both typical form and the variety the two basal segments of abdomen are deeply longitudinally strigose in the middle. The crenulation of the pronotal margins is subobsolete but traceable.

Note.—*Seirotrana repanda* Pasc. = *S. johnstonensis* Cart.—The latter name must be sunk. I was deceived by the distortion of my example, which a re-examination makes clear.

DYSTALICA MACKAYENSIS, n. sp.

Oval; head and pronotum opaque black, elytra and underside subnitid red, the former the darker; antennae fuscous; surface with short bristly hair.

Head densely and strongly punctate with granulose intervals, clypeus bilobed, with a deep medial bay, antennal orbits widely concave, subangulate in front of eyes; vertex flat, antennae slender, 2-3 lineate, 3 as long as 4-5 combined. 4-7 subconic, 8-10 successively widened and rounded, 11 largest. Prothorax widely transverse, widest near base, apex arcuate-emarginate, anterior angles less than 90°, sharply defined; base strongly bisinuate, produced backward near angles; sides well rounded, sinuate before the acute, but not dentate, posterior angles, margins with slightly hollowed foliation not differentiated from disc by sculpture, extreme border thin and entire, though outlined by the bristly hair; disc with faint indication of medial impression, otherwise uniformly punctate-pustulose as on head, the round punctures rather larger than on head. Scutellum transversely triangular. Elytra slightly wider than prothorax at base and three times as long, sides feebly widened behind middle, apex rather widely rounded; striate-punctate,

the rather large seriate punctures separated by cancellate ridges; intervals steeply convex, the second and sixth more prominent than the rest, and transversely rugose and finely granulose. Underside finely rugose, tibiae slender. *Dimensions*: 8×4 mm.

Habitat.—Queensland: Mackay (W. A. Macdougall).

Holotype (unique) in the Queensland Museum.

Family CISTELIDAE.

ANAXO TENUICORNIS, n. sp. Text-fig. 7.

Elongate, cylindric; nitid brownish or bronzy black, upper surface with a short pale pubescence; underside nitid black and glabrous, basal half of femora, also tibia (mostly) yellow; palpi, tarsi and remainder of legs black.

Head closely, finely punctate, rugose on the depressed rounded epistoma, eyes widely separated, not prominent; antennae very thin, 5–10 subequal in length, very lightly successively widening, 11 smaller and narrower than 10. Prothorax subquadrate, transversely convex, as wide as long, apex and base truncate, anterior angles depressed and rounded off, the posterior obtuse, sides nearly straight; disc with fine, close, shallow punctures; a large foveate depression at base, and (in one example) two foveae near middle, without a sign of medial line. Scutellum transverse. Elytra considerably wider than and thrice as long as prothorax, shoulders squarely rounded, sides parallel for the greater part, separately rounded at apex; striate-punctate, the striae fine, the punctures small and irregular, intervals—at least the three nearest suture—convex and finely rugulose. Femora moderately enlarged, tibiae lightly enlarged at apex. *Dimensions*: $9-10 \times 2\frac{1}{2}$ mm.

Habitat.—New South Wales: Wheogo, 12 miles N.E. of Dunedoo (A. Musgrave).

Two examples taken by Mr. Musgrave are clearly distinct from *A. cylindricus* Germ., by the much finer sculpture and fragile form, while the antennae are finer than in any of its congeners. One example, with mutilated antenna, shows a slight thickening of tibiae that suggests sexual distinction, but the fragile nature of the specimens prohibits manipulation. Holotype in Australian Museum.

HOMOTRYISIS ALBOLINEATA, n. sp. Text-fig. 8.

Elongate-obovate; bronzy chocolate, subnitid above, very nitid beneath, whole surface irregularly clothed with white recumbent pile.

Head: Clypeus subtruncate, front margin raised; eyes widely separated (as in *H. cisteloides* Newm.), antennae finely lineate, segments 3–11 subequal. Prothorax subconic, widest at base, subsinuate before the acute hind angles, thence converging to and arcuate towards apex; disc closely and a little irregularly punctate; medial channel distinct nearly throughout in one example (on apical half only in the 2nd). Scutellum densely clothed with white pubescence. Elytra considerably wider than prothorax at base, widest behind middle; striate-punctate with a short scutellary and nine other rows of small punctures placed in fine, clearly-cut striae; the seriate punctures very small except at sides and humeral region; intervals flat, those from the fifth outwards densely pubescent, forming distinct lines, especially when viewed from behind, the denuded intervals showing fine transverse rugae. Legs densely, the underside sparsely, pubescent. *Dimensions*: $13-14 \times 6$ mm.

Habitat.—New South Wales: Wheogo, N.E. of Dunedoo (A. Musgrave).

Two examples, both, I think, ♂, are nearest to *H. cisteloides* Newm., and *H. scutellaris* mihi—in size and form to the former, with the white scutellum of the latter. From both it is readily distinguished by the fine seriate punctures,

the flat interstices and less strong sculpture of the elytra; besides the well-defined linear pubescence on the external half. Holotype in the Australian Museum.

HOMOTRYSIS INTERSTITIALIS, n. sp.

Oblong-ovate; nitid black, antennae, palpi, tarsi red, tibiae piceous red; upper surface sparsely and lightly pubescent.

Head rounded in front, densely and finely punctate, eyes in ♂ closer than in ♀—in the latter the interspace about the diameter of an eye; antennal segments subtriangular, 4–10 subequal, 3 longer than 4, 11 shorter than 10. Prothorax subquadrate, slightly widest in front of middle, apex lightly convex, base bisinuate, with wide medial lobe; sides nearly straight, anterior angles widely rounded and depressed, posterior subrectangular; surface rather convex, lateral border unseen from above, disc densely, subcontiguously punctate, in one example (♀) showing a depressed medial line. Elytra obovate, slightly wider than prothorax at base, widest near apical declivity; striate-punctate, the striae very fine but distinct, containing minute punctures, intervals flat and wide, and crowded with punctures; these on basal half coarse, and more or less in geminate rows, becoming smaller and more irregular towards apex, a sparse pubescence visible on sides. Pro- and metasternum strongly punctate, the punctures more distant on the episterna. *Dimensions*: 9–10 × 3–4 mm.

Habitat.—Brisbane (L. Wassell).

Four examples, two of each sex, show a species distinct through the form of its prothorax and its unusual elytral sculpture; the former exceptionally robust, the latter having its interstitial punctures greatly exceeding those in the striae in size and prominence. *H. laticollis* Boh., perhaps its nearest ally, has the prothorax widest at, or near, base, the surface punctures fine and distant, the elytra having its striae punctures larger than the interstitial. Holotype ♂ and allotype ♀ in Coll. Carter.

HOMOTRYSIS RUFO-BRUNNEA, n. sp.

Elongate-ovate; nitid reddish-brown, oral organs, antennae and legs red; sparsely pubescent.

Head and pronotum densely punctate, the punctures large on basal region of the latter; eyes widely separated, interspace equal to the transverse diameter of an eye; antennae: segment 3 linear, 4–10 subequal, scarcely enlarged at apices, 11 more slender and pointed. Prothorax widest at base, thence lightly and arcuately narrowed to apex, this slightly produced in middle; front angles depressed and subobsolete, hind angles acute but blunted at extreme tips; base bisinuate with light medial depression and two wide, shallow excisions at base. Elytra wider than prothorax at base and slightly obovate, striate-punctate, intervals flat, the striae sometimes obliterated by the coarse punctures of the intervals, irregularly scattered but considerably larger than the indistinct small punctures in striae, and increasing in size laterally; sides and apical region with rather long subrecumbent pale hair. Metasternum sparsely punctate, abdomen minutely so, sides of segments lightly pubescent. Post-tarsi shorter than usual, the basal segment scarcely as long as the rest combined. *Dimensions*: 10 × 4.5 mm.

Habitat.—Mount Wilson, Blue Mountains (the author).

I took two examples, both, I think, ♀, in January, 1929, that are quite distinct from the two following species by colour and sculpture, though the three species are allied. Holotype in Coll. Carter.

HOMOTRYISIS SEXUALIS, n. sp.

Elongate-obovate; nitid black, lightly pubescent; antennae with basal segments piceous, the apical reddish; tibiae red, palpi and tarsi pale red.

Head sparsely punctate, interspace of eyes less than the diameter of an eye in ♂; antennae with segment 3 cylindrical, 4-10 subequal in length, and considerably widened at apex, 9-10-11 successively narrower. Prothorax rather convex, apex arcuate, advanced in middle, base rather strongly bisinuate; widest at base, thence lightly narrowed, anterior angles depressed and widely rounded off, the posterior acute; lateral border unseen from above; disc showing medial depression towards base, and two large triangular depressions accentuating basal sinuation; surface with large, round, rather close, punctures; these finer towards base, a few short hairs perceptible at sides. Elytra slightly wider than prothorax at shoulders, and more than four times as long; a narrow horizontal lateral border seen from above on basal half; striate-punctate, the striae well-defined, and containing punctures, large near base but gradually diminishing in size to apex; intervals flat for the greater part, feebly convex on declivity; the striae bordered by a single row of punctures of the same size as those in striae; the intervals otherwise with sparse smaller punctures bearing short red hairs, especially at sides and apex. Prosternum closely, meso- and metasternum very sparsely and irregularly, punctate; the medial area nearly laevigate; abdomen finely and sparsely punctate, with short recumbent hair. *Dimensions*: 12 × 4.5 mm.

Habitat.—New South Wales: Oberon (Mr. F. H. Taylor).

I am indebted to my friend, Mr. Taylor, of the School of Tropical Medicine, for this amongst other discoveries. A pair (♂, ♀) show striking sexual distinction, but the differences are chiefly limited to the following characters: ♀. The eyes more wide apart, antennal segments less wide, the prothorax clearly wider towards apex, giving a more robust, subquadrate appearance. The species is not very near any other, being more elongate-obovate, the anterior sides of pronotum much more rounded off than with *H. laticollis* Boh. Holotype ♂ and allotype ♀ in Coll. Carter.

HOMOTRYISIS SILVESTRIS, n. sp.

Elongate-ovate; sparsely pubescent, black, nitid; oral organs, antennae, tibiae and tarsi red.

♂. Head lightly punctate, eyes prominent and rather close, interspace less than half the transverse diameter of an eye; antennae having 3-11 subequal in length, 3 linear, 4-10 enlarged at apex, 11 very slender and pointed. Prothorax: Apex truncate, base bisinuate, widest at base, thence lightly and arcuately narrowed to apex, front angles depressed and rounded, hind angles acute; disc closely, not densely, punctate with wide and rather deep triangular basal excisions, a few upright red hairs at sides. Elytra as wide as prothorax at base, and more than thrice as long; striate-punctate, intervals nearly flat, each with two rows of round, clearly-cut punctures along the margins of striae; near base a few confusedly scattered punctures, sides and apical region with recumbent red hair. Metasternum strongly but sparsely punctate; abdomen finely so. Post tarsi with basal segment longer than the rest combined. *Dimensions*: 9-10 × 3.5-4.2 mm.

Habitat.—Queensland National Park, MacPherson Range (the author).

Three examples (2 ♂, 1 ♀) were taken by beating foliage in January, 1928, and are notable for the unusually clear-cut sculpture, without rugae or wrinkles.

Narrower than *H. sexualis* (supra), the sculpture of upper surface is stronger, the eyes closer, the antennal segments longer.

♀. Eyes more distant, prothorax more widely rounded. Holotype and allotype in Coll. Carter.

HOMOTRYSIS MONTIUM, n. sp.

This species is so near the preceding (*silvestris*) that at first it seemed conspecific; but the following differences distinguish it: Colour subnitid brown, legs (including femora) red, antennae and tarsi paler red.

♂. Eyes more widely separated, interspace about half the transverse diameter of one eye; antennal segments short, stout and linear. Pronotum more finely and closely punctate, the base only feebly bisinuate, with much less marked basal excisions. Elytral intervals strongly but irregularly punctate. Episterna coarsely punctate, abdomen longitudinally strigose. Post tarsi with basal segment about as long as the rest combined. *Dimensions*: ♂, 10 × 3; ♀, 10 × 3.5 mm.

Habitat.—New South Wales: Blue Mountains (the author).

A pair has long been in my cabinet unnamed.

♀. More robust, the eyes wider apart. Holotype and allotype in Coll. Carter.

HYBRENIA BORCHMANNI, n. sp.

Wide, obovate; nitid black, finely pilose; palpi, antennae and tarsi piceous, legs dark.

Head and pronotum densely and finely punctate; clypeus with a red border, labrum with a yellow fringe of hair; eyes large, prominent and rather close—interspace less than half diameter of an eye; antennae narrowly linear, 3–11 successively shorter. Prothorax one and a half times as wide as long; apex and base bisinuate, the latter feebly, the former clearly advanced at angles and at middle; widest at base, sides lightly, arcuately narrowed to apex, anterior angles depressed and rounded off, posterior obtuse; disc without obvious depressions, punctures fine and close at middle, larger towards sides, the narrow lateral border unseen from above, lateral half of disc with short, red, recumbent pile. Elytra slightly wider than prothorax at shoulders, widest at apical declivity, narrow horizontal border seen only near middle; striate-punctate, the striae lineate, with small, closely-set punctures; intervals flat, wide and closely set with punctures, in general larger than those in striae, round and separated on basal third, with a tendency to transverse wrinkling and coalescence behind this; finely pubescent at sides and apex. Underside glabrous and densely punctate, prosternum and epipleurae coarsely so. *Dimensions*: 16 × 6 mm.

Habitat.—N. Queensland: Endeavour River (in Coll. Borchmann).

A specimen (♂) was sent amongst other Cistelidae by my friend and fellow worker, F. Borchmann, that is distinct from previously described species. In my table (These Proc., 1929, p. 77) it could only be confused with *H. pimelioides* Hope, a larger species with pronotum and elytra more coarsely and sparsely punctate. Holotype in Coll. Carter.

Dimorphochilus.—Herr Borchmann has very courteously sent me for examination the actual female specimen of *D. diversicollis* Borch., photographed for his paper (*Faun. Sud. West. Aust.*, 1908). This confirms my opinion as expressed in a former number of these PROCEEDINGS (1932, p. 112) of its identity with *D. gouldi* Hope. I would here express my high appreciation of this generous service to the cause of accurate systematics.

Family CERAMBYCIDAE.

HESTHESIS DIVERGENS, n. sp.

♀. Narrowly elongate. Red with dark markings. Head black, thickly clad with orange hair on front; antennae red, becoming obscurely dark from the 7th segment; prothorax orange-red with a transversely oval, nude, black spot on middle of disc; scutellum black, elytra orange-red, the external half (except shoulders), also the apices reddish-brown; metasternum with yellow spot at middle, sides and base; abdomen yellow—apical segment orange-red—with three dark ventral and three dark dorsal bands. Prothorax roundly widened at middle. Elytra sharply divergent from in front of middle, terminating externally in an acute tooth, with small preceding incurvature. *Dimensions*: 19 × 4 (vix) mm.

Habitat.—New South Wales: Mullaley (the author).

I took a single female example near Garrawilla homestead in November, 1932, on *Leptospermum* flower. It has the elytra even more divergent than with the western species, *H. angulata* Pasc., from which it differs widely in colour. Its orange apical segment of abdomen distinguishes it from all others of its congeners except *crabroides* mihi and *vesparia* Pasc., from both of which it is readily separated by its divergent elytra. The antennae extend to half the length of the abdomen. ♂ latet. Holotype in Coll. Carter.

MICROTRAGUS DISCOSPINOSUS, n. sp. Text-fig. 4.

Chocolate-brown, squamose, with long erect pale hairs on upper surface. Elytra with two transverse white markings near middle; the apical region mottled with pale areas.

Head impunctate, interspace between eyes in ♀ less than the diameter of an eye, in ♂ still narrower. Antennae strongly pilose, each segment with pale ring at base; in the ♂ extending to apex of elytra, in ♀ not quite so. Prothorax widest at middle, sides lightly and evenly rounded; with two prominent, conical lateral spines and two long recurved spines on disc; in two examples a minute tubercle at middle, between the spines; surface pitted with large foveate punctures. Scutellum small, triangular. Elytra ovoid, apices truncate, with strong recurved basal spines, and five variously irregular rows of tubercles, placed more or less *en echelon*, in those examples showing most regularity, the first two rows meeting at base; surface pitted with large punctures, save where hidden by velvety derm. Epipleurae with rows of smaller tubercles. Prosternum coarsely punctate. *Dimensions*: ♂ 10 × 3.2 mm., ♀ 13 × 5 mm.

Habitat.—North Queensland: Endeavour River. National Museum and Coll. Carter.

Four examples, 3 ♂, 1 ♀, before me are strikingly distinct by the presence of the recurved spines on the disc of the pronotum instead of the usual tubercles, and the truncate apices of the elytra. Holotype ♂ and allotype ♀ in the National Museum, Melbourne.